

ART. VII.—*Catalogue of the Marine Shells of Victoria.*

PART VIII.

By G. B. PRITCHARD AND J. H. GATLIFF.

[Read 14th July, 1904.]

In view of having received several additional conchological books and papers from Europe since reading the last part of our Catalogue, there are a few additional references and remarks to some of the species contained therein, which it would be as well to take into consideration at this stage. And we also desire it to be noted that in the same part vii. we have wrongly quoted the date of vol. vi. of the second edition of Lamarck's *Anim. S. Vert.* by Deshayes, as 1819; the correct date is 1835.

SAXICAVA AUSTRALIS, Lamarck.

See part vii., p. 100.

1818. *Corbula australis*, Lamarck. *Anim. S. Vert.*, vol. v., p. 495, No. 1.

Obs.—It might be thought peculiar that no remark has been made on *S. arctica*, Linnaeus, in dealing with this species, but that form has been purposely omitted by us, owing to the confusion and uncertainty surrounding it. Our own form is extremely variable in its amount of deformity, and until a much more critical comparison of both shells and their contents can be made, we think it advisable to keep them distinct.

MESODESMA ERYCINAEA, Lamarck.

See part vii., p. 110.

1818. *Crassatella erycinaea*, Lamarck. *Anim. S. Vert.*, vol. v., p. 483, No. 9.

MESODESMA GLABRELLA, Lamarck.

See part vii., p. 111.

1818. *Amphidesma glabrella*, Lamarck. *Anim. S. Vert.*, vol. v., p. 493, No. 13.

ANAPELLA CUNEATA, Lamarck.

See part vii., p. 112.

1818. *Crassatella cuneata*, Lamarck. *Anim. S. Vert.*,
vol. v., p. 483, No. 8.
1818. *Crassatella cycladea*, Lamarck. *Id.*, vol. v., p.
483, No. 10.
1864. *Mactra (Mulinia) pinguis*, Crosse and Fischer.
Jour. de Conch., vol. xii., p. 349.
1865. *Mactra (Mulinia) pinguis*, Crosse and Fischer.
Id., vol. xiii., p. 427, pl. 11, f. 2.
1897. *Crassatella cycladea*, Tate. *T.R.S.S.A.*, vol. xxi.,
pt. 1, p. 46.
1897. *Mulinia pinguis*, Tate. *Id.*, p. 46.

Obs.—Mr. Hedley has drawn our attention to our omission to refer to Professor Tate's remarks, in which he states distinctly that his examination of the type specimen of *C. cycladea* in Paris, enabled him to include this as a synonym of the above. Professor Tate in the same paper also states that he regards *Mulinia pinguis*, Crosse and Fischer, as a monstrosity of *Anapella cuneata forma triquetra*.

DONAX DELTOIDES, Lamarck.

See part vii., pp. 118, 119.

1818. *Donax deltoides*, Lamarck. *Anim. S. Vert.*, vol.
v., p. 547, No. 5.
1818. *Donax epidermia*, Lamarck. *Id.*, p. 548, No. 12.

VENERUPIS EXOTICA, Lamarck.

See part vii., pp. 119, 120.

1818. *Venerupis exotica*, Lamarck. *Anim. S. Vert.*,
vol. v., p. 507, No. 4.
1818. *Venerupis carditoides*, Lamarck. *Id.*, p. 508,
No. 7.

CHORISTODON LUCINALIS, Lamarck.

See part vii., pp. 121, 122.

1818. *Petricola lucinalis*, Lamarck. *Anim. S. Vert.*,
vol. v., p. 504, No. 4.

Obs.—We previously followed several authors in setting this down as *Choristodon lapicidum*, Chemnitz, but not having access to Chemnitz's work we were unable to see his treatment. As, according to Dr. W. H. Dall (*Proceedings of the National Museum of the United States*, vol. xxvi., p. 339), a great deal of Chemnitz's work is not binomial, we should apparently accept Lamarck's naming. The type of *C. lucinalis*, Lamarck, originally came from King George's Sound, New Holland.

CHIONE STRIATISSIMA, Sowerby.

See part vii., pp. 125, 126, to replace *Chione cardioides*,
Lamarck.

Obs.—In our last paper we stated that it was *Venus cardioides*, Lamarck, from the West Indies which would require a change of name if it proved to be a *Chione*. Mr. Hedley has drawn our attention to the fact that Deshayes, in his *British Museum Catalogue of the Veneridae*, did class this species as a *Chione*, and on referring to the work we find that Deshayes has also correctly included *Cytherea cardilla*, Lamarck, as a synonym. In dealing with *Chione striatissima*, Sow., however, we overlooked the fact that Sowerby gave this name for *Erycina cardioides*, Lamarck, owing to his rather obscure method of doing it without any comment or explanation.

CIRCE PYTHINOIDES, T. Woods.

See part vii., pp. 131, 132.

Obs.—This shell, as already indicated in the previous part of this catalogue, is in the National Museum Collection, Melbourne, and is labelled as from Port Phillip Heads. We have not hitherto seen any other specimens in any Victorian collection, and a re-examination of the type specimens of the above has convinced us that it is synonymous with *Circe gibbia*, Lamarck (*Cytherea*), from Queensland and the Pacific. We therefore think that it is highly probable that some mistake may have been originally made in attributing this species to Victorian waters. The type is only a partially grown shell, and therefore not so tumid or elongate as the full grown *C. gibbia*, but agrees well in all other respects.

CARDIUM TENUICOSTATUM, Lamarck.

See part vii., pp. 136, 137.

1819. *Cardium tenuicostatum*, Lamarck. Anim. S. Vert., vol. vi., pt. 1, p. 5, No. 5.

CHAMOSTREA ALBIDA, Lamarck.

See part vii., pp. 137, 138.

1819. *Chama albida*, Lamarck. Anim. S. Vert., vol. vi., pt. 1, p. 96, No. 14.

In addition to the above remarks, the present paper includes the remainder of the bivalves, and refers to eighty species contained in the following families:—Ungulinidae, Erycinidae, Leptonidae, Solemyidae, Crassatellitidae, Condyllocardiidae, Carditidae, Trigoniidae, Nuculidae, Arcidae, Mytilidae, Philobryidae, Pteriidae, Pinnidae, Spondylidae, Limidae, Anomiidae, Pectenidae, and Ostreidae.

The previous parts of this Catalogue have appeared as follows:—

Part	I.,	published	May,	1898,	containing	85	species.
„	II.,	„	February,	1899,	„	59	„
„	III.,	„	April,	1900,	„	78	„
„	IV.,	„	August,	1900,	„	65	„
„	V.,	„	April,	1902,	„	132	„
„	VI.,	„	February,	1903,	„	112	„
„	VII.,	„	September,	1903,	„	96	„

The total number of species dealt with now amount to 707, which may be summarised as—

Cephalopoda	...	...	...	...	12
Pteropoda	...	...	...	...	12
Gastropoda	...	...	...	...	505
Scaphopoda	...	...	...	...	2
Lamellibranchiata	...	...	...	...	176

Total 707 species

Adding on to this the 41 species of Gastropoda recorded by one of us in the *Victorian Naturalist* (vol. xx., No. 7, Nov., 1903), which have been discovered subsequent to the publication

of the various parts on the Gastropoda, our Victorian list of Marine Shells now contains 748 species.

We intend to publish a concluding part to this Catalogue which will deal with matters which we regard as requiring revision, together with the additional material since obtained. It will also include a revised Bibliography and Index to facilitate reference.

Family UNGULINIDAE.

Genus *Diplodonta*, Brown, 1831.

DIPLODONTA SPHAERICULA, Angas.

Diplodonta sphaericula, Deshayes, M.S.

1867. *Mysia sphaericula*, Angas. P.Z.S. Lond., p. 927.
No. 92.

1890. *Mysia sphaericula*, Whitelegge. P.R.S. N.S.W.,
vol. xxiii., p. 79 in list, No. 133.

Hab.—Western Port.

DIPLODONTA GLOBULARIS, Lamarck.

1818. *Lucina globularis*, Lamarck. Anim. S. Vert.,
vol. v., p. 544, No. 20.

1835. *Lucina globularis*, Lamarck. Id., ed. Desh., vol.
vi., p. 231, No. 20.

1839. *Lucina globularis*, Lamarck. Id. (3rd ed.
Deshayes and Edwards), vol. ii., p. 577, No. 20.

1842. *Lucina globularis*, Hanley. Cat. Rec. Biv. Shells,
p. 77.

1850. *Lucina globularis*, Reeve. Conch. Icon., vol. vi.,
pl. 9, f. 53.

1856. *Lucina globularis*, Hanley, Cat. Rec. Biv. Shells,
p. 348, pl. 14, f. 16.

1887. *Diplodonta globularis*, Tate. T.R.S. S.A., vol.
ix., p. 97, No. 97.

1901. *Diplodonta globularis*, Tate and May. P.L.S.
N.S.W., vol. xxvi., pt. 3, p. 432.

Hab.—Port Phillip; Western Port.

DIPLODONTA ADAMSI, Angas.

1867. *Mysia* (*Felania*) *adamsi*, Angas. P.Z.S. Lond.,
p. 910, pl. 44, f. 9.
1867. *Mysia* (*Felania*) *adamsi*, Angas. Id., p. 927, No.
94.
1888. *Sacchia* *adamsi*, Tate. T.R.S. S.A., vol. x., p.
68, No. 98a.
1893. *Diplodonta* *adamsi*, Adcock Hand List Aquatic
Moll. S.A., p. 12, No. 119.

Hab.—Port Phillip; Western Port.

Family ERYCINIDAE.

Genus *Kellia*, Turton, 1822.

KELLIA ROTUNDA, Deshayes.

1855. *Erycina* *rotunda*, Deshayes. P.Z.S. Lond., p. 181.
1867. *Kellia* *rotunda*, Angas. Id., p. 927, No. 98.
1885. *Kellia* *rotunda*, var., E. A. Smith. Chall., zool.,
vol. xiii., p. 202, pl. 11, f. 5-5b.
1887. *Kellia* *rotunda*, Tate. T.R.S. S.A., vol. ix., p. 98,
No. 101.
1901. *Kellya* *rotunda*, Tate and May. P.L.S. N.S.W.,
vol. xxvi., pt. 3, p. 432.

Hab.—Western Port; off East Moncoeur Island, Bass Straits
(Challenger).

KELLIA ROSTELLATA, Tate.

1889. *Kellia* *rostellata*, Tate. T.R.S. S.A., vol. xi., p.
63, pl. 11, f. 14.
1901. *Kellya* *rostellata*, Tate and May. P.L.S. N.S.W.,
vol. xxvi., pt. 3, p. 432.

Hab.—Portland, Torquay, Barwon Heads, Flinders, Western
Port. Type locality.—“Dredged in life, seven to nine fathoms,
attached to seaweed, Port Phillip Heads, Victoria (J. B.
Wilson).”

Obs.—Professor Tate does not say where the type specimen
of this species is located, but we presume that it was in his

own collection, which has since passed into the possession of Dr. J. C. Verco, of Adelaide.

KELLIA CYCLADIFORMIS, Deshayes.

? 1839 *Kellia cycladiformis*, Deshayes. *Trait, Elem. de Conch.*, pl. 11, f. 6-9.

Hab.—Flinders (Mrs. Kenyon).

Genus *Montacuta*, Turton, 1819.

MONTACUTA SEMIRADIATA, Tate.

1889. *Montacuta semiradiata*, Tate. *T.R.S. S.A.*, vol. xi., p. 63, pl. 11, f. 2.

Hab.—“Parasitic on *Echinocardium*, east of Mud Island, Port Phillip, in seven to ten fathoms (J. B. Wilson).”
Port Fairy, Flinders, Western Port.

Obs.—The remarks already made on *Kellia rosetellata*, Tate, also apply to this species.

Genus *Lasaea*, Leach, 1827.

LASAEA RUBRA, Montagu.

1803. *Cardium rubrum*, Montagu. *Test. Brit.*, p. 83, pl. 83, pl. 27, f. 4.

1853. *Kellia rubra*, Forbes and Hanley. *Brit. Moll.*, vol. ii., p. 94, pl. 36, f. 5-7, and pl. 0, f. 3.

1863. *Lasaea rubra*, Jeffreys. *Brit. Conch.*, vol. ii., p. 219, pl. 5, f. 2.

1875. *Kellia (Poronia) rubra*, Woodward. *Man. Moll.*, p. 459, pl. 19, f. 12.

1884. *Lasaea rubra*, Tryon. *Struct. and Syst. Conch.*, vol. iii., p. 219, pl. 120, f. 90.

1887. *Lasaea rubra*, Tate. *T.R.S.S.A.*, vol. ix., p. 99, No. 109.

1901. *Lasaea rubra*, Tate and May. *P.L.S. N.S.W.*, vol. xxvi., pt. 3, p. 432.

Hab.—Common in rock crevices along the coast generally. Especially associated with *Mytilus rostratus*.

Obs.—The synonymy of this species being particularly heavy, we have restricted the references to the above works; most of

which are readily accessible to local workers. The following specific names attached to various genera by different authors have been cited as synonyms of this species:—*australis*, *adansonii*, *fontenayi*, *nucleola*, *parreysi*, *purpurata*, *scalaris*, *seminulum*, and *violacea*.

Genus *Mylitta*, D'Orbigny and Recluz, 1850.

MYLITTA TASMANICA, T. Woods.

1875. *Pythina tasmanica*, T. Woods. P.R.S. Tas., p. 162.
1887. *Pythina tasmanica*, Tate. T.R.S. S.A., vol. ix.,
p. 98, pl. 5, f. 12.
1892. *Mylitta tasmanica*, Tate. Id., vol. xv., p. 135.
1901. *Mylitta tasmanica*, Tate and May. P.L.S. N.S.W.,
vol. xxvi., pt. 3., p. 433.

Hab.—Sandringham, Sorrento, Port Phillip; Shoreham, San Remo, Western Port.

MYLITTA AURICULATA, E. A. Smith.

1891. *Mylitta auriculata*, E. A. Smith. A.M.N.H., p.
236, pl. 13, f. A to C.
1901. *Mylitta auriculata*, Tate and May. P.L.S. N.S.W.,
vol. xxvi., pt. 3, p. 433.

Hab.—Flinders, Western Port.

MYLITTA DESHAYESI, D'Orbigny and Recluz.

1850. *Mylitta deshayesi*, D'Orbigny and Recluz. Jour.
de. Conch., p. 292, pl. 11, f. 12-14.
1887. *Pythina deshayesiana*, Tate non Hinds. T.R.S.
S.A., vol. ix., p. 98, No. 103.

Hab.—Warrnambool; Sorrento.

Family LEPTONIDÆ.

Genus *Lepton*, Turton, 1822.

LEPTON TRIGONALE, Tate.

1879. *Lepton trigonale*, Tate. T.R.S. S.A., vol. ii., p.
131, pl. 5, f. 5.
1887. *Lepton trigonale*, Tate. Id., vol. ix., p. 99, No. 107.

Hab.—Dredged in Western Port.

LEPTON AUSTRALE, Angas.

1878. *Lepton australe*, Angas. P.Z.S. Lond., p. 863, pl. 54, f. 14.

1887. *Lepton australe*, Tate. T.R.S. S.A., vol. ix., p. 98, No. 106.

Hab.—Sorrento, Port Phillip.

Genus *Rochefortia*, Velain, 1876.

ROCHEFORTIA DONACIFORMIS, Angas.

1878. *Mysella donaciformis*, Angas. P.Z.S. Lond., p. 863, pl. 54, f. 13.

1887. *Mysella donaciformis*, Tate. T.R.S.S.A., vol. ix., p. 99, No. 110.

1900. *Rochefortia donaciformis*, Dall. Trans. Wag. Inst., vol. iii., pt. 5, p. 1157.

1901. *Rochefortia donaciformis*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 433.

1902. *Rochefortia donaciformis*, Hedley. P.L.S. N.S.W., vol. xxvii. pt. 1, p. 7, pl. 1, f. 10-14.

Hab.—Hobson's Bay, Sandringham, Sorrento, Port Phillip; Western Port; Torquay.

Genus *Cyamium*, Philippi, 1845.

CYAMIUM MACTROIDES, Tate and May.

1900. *Cyamium mactroides*, Tate and May. T.R.S. S.A., vol. xxiv., p. 102.

1900. *Cyamium mactroides*. Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 433, pl. 27, f. 103.

Hab.—Dredged off Rhyll, Western Port.

Family SOLEMYIDAE.

Genus *Solemya*, Lamarck, 1818.

SOLEMYA AUSTRALIS, Lamarck.

1818. *Solemya australis*, Lamarck. Anim. S. Vert., vol. v., p. 489, No. 1.

1835. *Solemya australis*, Lamarck. Id., 2nd ed. Desh., vol. vi., p. 124, No. 1.
1839. *Solemya australis*, Lamarck. Id. (3rd ed. Deshayes and Edwards), vol. ii., p. 543, No. 1.
1842. *Solemya australis*, Hanley. Cat. Rec. Biv. Shells, p. 41.
1856. *Solemya australis*, Hanley. Id., p. 341, pl. 11, f. 25 (erroneously f. 27 on explanation to plate).
1865. *Solemya australis*, Angas. P.Z.S. Lond., p. 652, No. 61.
1875. *Solemya australis*, Reeve. Conch. Icon., vol. xx., pl. 1, f. 5.
1884. *Solemya australis*, Tryon, Struct. and Syst. Conch., vol. iii., p. 223, pl. 123, f. 63.
1887. *Solemya australis*, Tate. T.R.S. S.A., vol. ix., p. 99, No. 112.

Hab.—Shoreham, Western Port; Anderson's Inlet (W. H. Ferguson), Otway Coast.

Family CRASSATELLITIDAE.

Genus *Crassatellites*, Kruger, 1823.

CRASSATELLITES AURORA, Adams and Angas.

1863. *Crassatella aurora*, A. Adams and Angas. P.Z.S. Lond., p. 426, pl. 37, f. 15.
1885. *Crassatella aurora*, E. A. Smith. Chall. Zool., vol. xiii., Lam., p. 219.
1901. *Crassatella aurora*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 433.

Hab.—Off East Moncoeur Island, Bass Straits, 38 fathoms sand and shells (Challenger).

Obs.—Mr. E. A. Smith records the fact that the type of this species was presented to the British Museum by G. F. Angas, and was collected at Bank's Strait, Tasmania. Mr. Hedley (Mem. Aust. Mus., vol. iv., pt. 5, p. 313), in a footnote, suggests that *C. carnea*, Tate, is probably a synonym of the above species, which he regards as "unrecognised by local workers"; but judging by the treatment of *C. aurora* by Messrs. Tate and May, the former apparently did not hold this opinion.

CRASSATELLITES KINGICOLA, Lamarck.

1801. *Crassatella kingicola*, Lamarck. *Ann. du Mus.*, vol. vi., p. 408.
1818. *Crassatella kingicola*, Lamarck. *Anim. S. Vert.*, vol. v., p. 481, No. 1.
- ? 1822. *Crassatella kingicola*, Sowerby. *Genera*, vol. ii., pl. 2, 3 figures.
1835. *Crassatella kingicola*, Lamarck. *Anim. S. Vert.*, 2nd ed. *Desh.*, vol. vi., p. 109, No. 1.
1839. *Crassatella kingicola*, Lamarck. *Id.* (3rd ed. *Deshayes and Edwards*), vol. ii., p. 538, No. 1.
1842. *Crassatella kingicola*, Hanley. *Cat. Rec. Biv. Shells*, p. 35.
1842. *Crassatella castanea*, Hanley. *Id.*, p. 36.
1843. *Crassatella kingicola*, Reeve. *Conch. Icon.*, vol. i., pl. 1, f. 5.
1843. *Crassatella castanea*, Reeve. *Id.*, pl. 1, f. 3.
1856. *Crassatella kingicola*, Hanley. *Cat. Rec. Biv. Shells*, p. 340, pl. 12, f. 17.
1856. *Crassatella castanea*, Hanley. *Id.*, p. 340, pl. 12, f. 23.
1865. *Crassatella castanea*, Angas. *P.Z.S. Lond.*, p. 652, No. 62.
1875. *Crassatella pulchra*, Woodward. *Man. Conch.*, p. 466, f. 259.
1878. *Crassatella kingicola*, T. Woods. *P.R.S. Tas.*, p. 50.
1887. *Crassatella castanea*, Tate. *T.R.S. S.A.*, vol. ix., p. 100, No. 113.
1890. *Crassatella kingicola*, Brazier. *P.L.S. N.S.W.*, vol. ix., 2nd ser., p. 749.
1901. *Crassatella kingicola*, Tate and May. *P.L.S. N.S.W.*, vol. xxvi., pt. 3, p. 434.

Hab.—Off Lakes' Entrance, Gippsland; Port Albert; Anderson's Inlet, Western Port.

Obs.—Mr. Hedley has drawn our attention to the fact that he regards *C. ponderosa*, Gmelin, as the correct name for this species. The figure given by Woodward of this species, which he quotes as the type of the genus (*Man. Conch.*, p. 466, pl. xxi.,

f. 4) appears to us to represent a West Australian shell, which we have examined, and at present regard as a distinct species. Woodward's quotation of *C. ponderosa*, Gmelin, as the type of *Crassatella*, hardly seems consistent with Dall's reference to *C. cygnea*, Spengler, as the type. A considerable synonymy has been given to *C. kingicola* by various authors, amongst others *C. pulchra*, Reeve, and *C. decipiens*, Reeve, but judging from Reeve's figures and descriptions, we are inclined to think they may be distinct.

Genus **Cuna**, Hedley, 1902.

CUNA DELTA, Tate and May.

1900. *Carditella delta*, Tate and May. T.R.S. S.A., vol. xxiv., p. 102.
1901. *Carditella delta*, Hedley. Rec. Austr. Mus., vol. iv., No. 1, pp. 23, 24, f. 5a. (3), 5b. (2).
1901. *Carditella delta*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 434, pl. 27, f. 100, 101.
1902. *Cuna delta*, Hedley. Mem. Austr. Mus., vol. iv., pt. 5, p. 316.

Hab.—Dredged off Rhyll, Western Port.

Family **CONDYLOCARDIIDAE**.

Genus **Condylocardia**, Bernard, 1897.

CONDYLOCARDIA PECTINATA, Tate and May.

1900. *Carditella pectinata*, Tate and May. T.R.S. S.A., vol. xxiv., p. 103.
1901. *Carditella pectinata*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 435, pl. 27, f. 96, 97.
1902. *Condylocardia pectinata*, Hedley. Mem. Austr. Mus., vol. iv., pt. 5, p. 318.

Hab.—Dredged off Rhyll, Western Port.

CONDYLOCARDIA PROJECTA, Hedley.

1902. *Condylocardia projecta*, Hedley. Mem. Austr. Mus., vol. iv., pt. 5, p. 317, f. 57.

Hab.—Dredged off Rhyll, Western Port.

Family CARDITIDAE.

Genus *Cardita*, Bruguière. 1789.

CARDITA AMABILIS, Deshayes.

1852. *Cardita amabilis*, Deshayes. P.Z.S. Lond., p. 102,
pl. 17, f. 8, 9.
1878. *Cardita amabilis*, T. Woods. P.R.S. Tas., p. 54.
1880. *Cardita amabilis*, Hutton. Man. N.Z., Moll., p.
159.
1901. *Cardita amabilis*, Tate and May. P.L.S. N.S.W.,
vol. xxvi., pt. 3, p. 434.

Hab.—Western Port.

CARDITA BIMACULATA, Deshayes.

1852. *Cardita bimaculata*, Deshayes. P.Z.S. Lond., p.
102, pl. 17, f. 4, 5.
1852. *Cardita gunni*, Deshayes. Id., p. 101.
1876. *Cardita atkinsoni*, T. Woods. P.R.S. Tas., p. 27,
No. 1.
1878. *Cardita gunni*, T. Woods. Id., p. 54.
1880. *Cardita bimaculata*, Hutton. Man. N.Z., Moll., p.
159.
1886. *Cardita bimaculata*, E. A. Smith. Chall. Zool.,
vol. xiii., Lamelli, p. 211.
1893. *Cardita bimaculata*, Adcock. Hand List Aquat.
Moll. S.A., p. 13, No. 143.
1901. *Cardita bimaculata*, Tate and May. P.L.S.
N.S.W., vol. xxvi., pt. 3, p. 434.

Hab.—Common in Port Phillip and Western Port.

CARDITA QUOYI, Deshayes.

1852. *Cardita quoyi*, Deshayes. P.Z.S. Lond., p. 103.
1887. *Cardita rosulenta*, Tate. T.R.S. S.A., vol. ix., p.
69, pl. 5, f. 3, and p. 100, No. 114.
1901. *Cardita quoyi*, Tate and May. P.L.S. N.S.W.,
vol. xxvi., pt. 3, p. 434.

Hab.—Flinders, Western Port.

CARDITA DILECTA, E. A. Smith.

1885. *Cardita dilecta*, E. A. Smith. Chall. Zool., vol. xiii., Lamelli, 213, pl. 15. f. 4, 4a.

Hab.—Off East Moncoeur Island, Bass Straits, 38 to 40 fathoms (Challenger); Ocean Beach, Point Nepean.

CARDITA BEDDOMEI, E. A. Smith.

1885. *Cardita beddomei*, E. A. Smith. Chall. Zool., vol. xiii., Lamelli, p. 211, pl. 15, f. 5, 5a.

Hab.—Off East Moncoeur Island, Bass Straits, in 38 to 40 fathoms (Challenger).

Genus *Mytilicardia*, Blainville, 1821.

MYTILICARDIA CRASSICOSTA, Lamarck.

1819. *Cardita crassicosta*, Lamarck. Anim. S. Vert., vol. vi., pt. 1, p. 24, No. 13.

1835. *Cardita crassicosta*, Lamarck. Id. (2nd ed. Desh.), vol. vi., p. 430, No. 13.

1835. *Cardita citrina*, Lamarck. Id., p. 434, No. 21.

1839. *Cardita crassicosta*, Lamarck. Id. (3rd ed. Deshayes and Edwards), vol. ii., p. 636, No. 13.

1839. *Cardita citrina*, Lamarck. Id., p. 637, No. 21.

1842. *Cardita crassicosta*, Hanley. Cat. Rec. Biv. Shells, p. 146.

1843. *Cardita crassicostata*, Reeve. Conch. Icon., vol. i., pl. 2, f. 7, a, b, c, d, e.

1843. *Cardita tridacnoides*, Menke. Moll. Nov. Holl., p. 39, No. 222.

1856. *Cardita crassicosta*, Hanley. Cat. Rec. Biv. Shells, p. 367, pl. 18, f. 19.

1865. *Mytilicardia crassicostata*, Angas. P.Z.S. Lond., p. 652, No. 63.

1887. *Mytilicardia crassicosta*, Tate. T.R.S.S.A., vol. ix., p. 100, No. 116.

Hab.—Ocean Beach, Sorrento.

Obs.—Messrs. G. P. Deshayes and Milne Edwards note that *Cardita citrina*, Lamarck, is represented in the Paris Museum only by a single example; it is a young shell, and is regarded by them as a colour variety of *Cardita crassicosta*.

MYTILICARDIA CALYCVLATA, Linnaeus.

1767. *Chama calyculata*, Linnaeus. Syst. Nat., p. 1138.
 1819. *Cardita calyculata*, Lamarck. Anim. S. Vert.,
 vol. vi., pt. 1, p. 24.
 1819. *Cardita aviculina*, Lamarck. Id., p. 26, No. 20.
 1835. *Cardita calyculata*, Lamarck. Id. (2nd ed. Desh.),
 vol. vi., p. 431, No. 15.
 1835. *Cardita aviculina*, Lamarck. Id., p. 434, No. 20.
 1839. *Cardita calyculata*, Lamarck. Id. (3rd ed.
 Deshayes and Edwards), vol. ii., p. 636, No.
 15.
 1839. *Cardita aviculina*, Lamarck. Id., p. 637, No. 20.
 1841. *Cardita aviculina*, Delessert. Recueil de Coq.,
 pl. 11, f. 10 a, b, c.
 1842. *Cardita calyculata*, Hanley. Cat. Rec. Biv.
 Shells, p. 147.
 1842. *Cardita aviculina*, Hanley. Id., p. 148.
 1843. *Cardita calyculata*, Reeve. Conch. Icon., vol. i.,
 pl. 1, f. 1.
 1852. *Cardita excavata*, Deshayes. P.Z.S. Lond., p.
 100, pl. 17, f. 1-3.
 1856. *Cardita calyculata*, Hanley. Cat. Rec. Biv.
 Shells, p. 367, pl. 18, f. 7.
 1856. *Cardita aviculina*, Hanley. Id., p. 367, pl. 18,
 f. 24.
 1876. *Mytilicardia tasmanica*, T. Woods. P.R.S. Tas.,
 p. 161.
 1885. *Cardita calyculata*, E. A. Smith. Chall. Zool.,
 vol. xiii., pp. 14, 210.
 1901. *Mytilicardia aviculina*, Tate and May. P.L.S.
 N.S.W., vol. xxvi., pt. 3, pp. 434, 462.

Hab.—Port Phillip; Western Port; Back Beach, Sorrento to Flinders; Barwon Heads; Torquay; Station 162, off East Moncoeur Island, Bass Strait, in 38 to 40 fathoms (Challenger).

Obs.—This species has been a somewhat difficult one to deal with, as the original of Linnaeus included two species, hence some of the earlier illustrations are unsatisfactory for the identification of our form. Mr. E. A. Smith in his treatment of *C. calyculata* includes *C. muricata*, Reeve, as a synonym, but the latter we take to represent a good Queensland and Pacific species.

Genus **Carditella**, Smith.

CARDITELLA ANGASI, E. A. Smith.

1885. *Carditella angasi*, E. A. Smith. *Chall. Zool.*, vol. xiii., p. 217, pl. 15, f. 9-9a.

1902. *Carditella angasi*, Hedley. *Mem. Austr. Mus.*, vol. iv., pt. 5, p. 319.

Hab.—Port Phillip Heads.

Family **TRIGONIDAE**.

Genus **Trigonia**, Bruguière, 1789.

TRIGONIA MARGARITACEA, Lamarck.

1804. *Trigonia margaritacea*, Lamarck. *Ann. du Mus.*, vol. iv., p. 355, pl. 67, f. 2.

1819. *Trigonia pectinata*, Lamarck. *Anim. S. Vert.*, vol. vi., pt. 1, p. 63, No. 1.

? 1822. *Trigonia margaritacea*, Sowerby. *Genera*, pl. 84, f. 1, 2.

1827. *Trigonia pectinata*, Crouch. *Introd. to Lamarck's Conchology*, p. 21, pl. 10, f. 10.

1828. *Chama pectinata*, Wood. *Index. Test. Sup.*, p. 6, pl. 2, f. 6.

1835. *Trigonia pectinata*, Lamarck. *Anim. S. Vert.* (2nd ed. Deshayes), vol. vi., p. 514, No. 1.

1835. *Trigonia pectinata*, Quoy and Gaimard. *Astrolabe Zool.*, vol. iii., p. 474, pl. 78, f. 1-4.

1839. *Trigonia pectinata*, Lamarck. *Anim. S. Vert.* (3rd ed. Deshayes and Edwards), vol. ii., 662, No. 1.

1843. *Trigonia pectinata*, Hanley. Cat. Rec. Biv. Shells, p. 172.
1849. *Trigonia margaritacea*, Huxley. P.Z.S. Lond., p. 31, pl. 3, f. 1-3.
1850. *Trigonia margaritacea*, Huxley. A.M.N.H., vol. v., p. 141.
1858. *Trigonia margaritacea*. H. and A. Adams. Genera, pl. 124, f. 1-1b.
1860. *Trigonia margaritacea*, Reeve. Conch. Icon., vol. xii., pl. 1, f. 3a-3d.
1875. *Trigonia pectinata*, Woodward. Man. Moll., pp. 25 and 430, figs. 18 and 221.
1878. *Trigonia margaritacea*, Angas. P.Z.S. Lond., p. 871.
1884. *Trigonia dubia*, Sowerby. Thes. Conch., vol. v., p. 188, pl. 492, f. 5.
1885. *Trigonia margaritacea*, E. A. Smith. Chall. Zool., vol. xiii., p. 224.
1887. *Trigonia margaritacea*, Tate. T.R.S. S.A., vol. ix., p. 101, No. 124.
1901. *Trigonia margaritacea*, Hall. P.R.S., n.s., vol. xiv., pt. 1, p. 17, figure in text.
1902. *Trigonia margaritacea*, Hedley. Mem. Austr. Mus., vol. iv., pt. 5, pp. 301, 302.

Hab.—Western Port, dredged from 5 to 7 fathoms off Rhyll ; Port Phillip, off Portsea ; off East Moncoeur Island, Bass Strait, 38 fathoms sand and shells (Challenger).

Obs.—A slight variation of this species has been erroneously identified by the late Sir F. McCoy as identical with his fossil species *T. acuticostata*, originally referred to as from the Older Pliocene Beds of Mordialloc. Fortunately, the living specimens upon which McCoy's determinations were made, have been preserved in the National Museum, and a close comparison has been made between them and the living *T. margaritacea* on the one hand, and the Miocene or Kalimnan fossil originally described under the name of *T. acuticostata* on the other, and there can be no doubt whatever, that a misidentification has been made by McCoy as to the recent species, while the fossil form is quite a distinct species. McCoy's name of *T.*

acuticostata must therefore be still retained for the fossil shell, and we cannot accept Mr. Hedley's treatment in regarding it as a mere variant of *T. margaritacea*.

Family NUCULIDÆ.

Genus *Nucula*, Lamarek, 1799.

NUCULA MICANS, Angas.

1878. *Nucula micans*, Angas. P.Z.S. Lond., p. 864, pl. 54, f. 16.
1887. *Nucula micans*, Tate. T.R.S. S.A., vol. ix., p. 102, No. 125.
1901. *Nucula antipodum*, Tate and May (non Hanley). P.L.S. N.S.W., vol. xxvi., pt. 3, p. 435.

Hab.—Dredged off Rhyll, Western Port. Corio Bay, Port Phillip.

Obs.—The late Professor Tate identified the above species as *N. antipodum*, Hanley, for one of us, but on going into the original description of that species, and the particulars and figure given by Sowerby in his *Thesaurus Conchyliorum*, we consider it to be a distinct species. On the other hand, our shell agrees well with the description and figure given by Angas of *N. micans*.

NUCULA HEDLEYI, nom. mut.

1877. *Nucula minuta*, T. Woods (non Gould and others). P.R.S. Tas., p. 156.
1902. *Pronucula minuta*, Hedley. Mem. Austr. Mus., vol. iv., pt. 5, p. 291, f. 40.

Hab.—Western Port.

Obs.—We agree with Mr. Hedley in his conclusions as to the distinctness of this species from *N. antipodum* and *N. micans*, but have been unable to regard it as validly placed in his new genus *Pronucula*, our examples being apparently indistinguishable from *Nucula*. In view of the prior use of this specific name by several authors, we have deemed it necessary to change the name as above.

NUCULA OBLIQUA, Lamarck.

1819. *Nucula obliqua*, Lamarck. *Anim. S. Vert.*, vol. vi., pt. 1, p. 59, No. 5.
1835. *Nucula obliqua*, Lamarck. *Id.* (2nd ed. Desh.), vol. vi., p. 505, No. 5.
1839. *Nucula obliqua*, Lamarck. *Id.* (3rd ed. Deshayes and Edwards), vol. ii., p. 659, No. 5.
1862. *Nucula obliqua*, Chenu. *Man. de Conch.*, vol. ii., p. 179, f. 897.
1876. *Nucula tumida*, T. Woods (non Hinds, Philippi, etc.). *P.R.S. Tas.*, p. iii.
1877. *Nucula grayi*, T. Woods (non D. Orbnigny). *Id.* p. 55.
1884. *Nucula obliqua*, Tryon. *Struct. and Syst. Conch.*, vol. iii., p. 248, pl. 126, f. 27.
1886. *Nucula tumida*, Tate. *T.R.S. S.A.*, vol. viii., p. 127, pl. 6, f. 6a, 6b.
1896. *Nucula tenisoni*. Pritchard. *P.R.S. Vic.*, vol. viii., n.s. pp. 128-130.
1902. *Nucula obliqua*, Hedley. *Mem. Austr. Mus.*, vol. iv., pt. 5, p. 292.

Hab.—Dredged alive off Brighton and off Beaumaris, Port Phillip, from sandy mud. St. Kilda, Hobson's Bay.

Obs.—This species, though not very common living on our shores at the present time, was very abundant during Tertiary time, being a very common fossil species in the Victorian Miocene (or Kalimnan) beds, and also extending into the Eocene (or Balcombian) beds, but not in such great abundance. The antiquity of this species is of interest, and its persistency of form is remarkable, while its distribution as a fossil mainly accounts for its synonymy.

Genus *Leda*, Schumacher, 1817.

LEDA CRASSA, Hinds.

1843. *Nucula crassa*, Hinds. *P.Z.S. Lond.*, p. 99.
1847. *Leda chuva*, Gray in Juke's *Voy. Fly.*, vol. ii. app. p. 356, pl. 2, f. 6.

1860. *Leda chuva*, Sowerby. *Thes. Conch.*, vol. iii., p. 119, pl. 228, f. 67.
1860. *Leda crassa*, Sowerby. *Id.*, p. 120, pl. 228, f. 69.
1871. *Leda crassa*, Sowerby in Reeve. *Conch. Icon.*, vol. xviii., pl. 5, f. 27.
1871. *Laeda chuva*, Sowerby in Reeve. *Id.*, pl. 7, f. 46.
1877. *Leda crassa*, Angas. *P.Z.S. Lond.*, p. 193.
1878. *Leda crassa*, T. Woods. *P.R.S. Tas.*, p. 32.
1885. *Leda crassa*, E. A. Smith. *Chall. Zool.*, vol. xiii., Lamelli, p. 237.
1887. *Leda crassa*, Tate. *T.R.S. S.A.*, vol. ix., p. 102, No. 126.
1902. *Leda crassa*, Hedley. *Mem. Austr. Mus.*, vol. iv., pt. 5, p. 294.

Hab.—Western Port; Anderson's Inlet (W. H. Ferguson); Port Albert (T. Worcester); off entrance to Port Phillip 38 fathoms (Challenger). Apollo Bay.

Obs.—This species is also a common Miocene or Kalimnan fossil in Gippsland, and also occurs in the Pliocene or Werriookian Beds at Limestone Creek, Western Victoria.

LEDA ENSICULA, Angas.

1877. *Leda ensicula*, Angas. *P.Z.S. Lond.*, p. 177, pl. 26, f. 27.
1885. *Leda ensicula*, E. A. Smith. *Chall. Zool.*, vol. xiii., Lamelli, p. 239.
1902. *Leda ensicula*, Hedley. *Mem. Austr. Mus.*, vol. iv., pt. 5, p. 293, f. 41.

Hab.—Off the entrance to Port Phillip, in 33 fathoms sand, (Challenger).

Obs.—Type in the British Museum dredged off Port Jackson Heads in 45 fathoms. We agree with Mr. Hedley in regarding *L. lefroyi*, Beddome, as a distinct species from the above, the type of the latter being in the Hobart Museum, and has been examined by one of us.

Family **ARCIDAE.**Genus **Arca**, Linnaeus.**ARCA NAVICULARIS**, Bruguière.

1797. *Arca navicularis*, Bruguière. *Encyc. Meth. vers.*, p. 99.
1817. *Arca navicularis*, Dillwyn. *Desc. Cat. Rec. Shells*, p. 227.
1825. *Arca navicularis*, Wood. *Index. Test.*, p. 44, pl. 9, f. 5.
1843. *Arca navicularis*, Hanley. *Cat. Rec. Biv. Shells*, p. 152.
1844. *Arca navicularis*, Reeve. *Conch. Icon.*, vol. ii., pl. 11, f. 70.
1887. *Arca navicularis*, Tate. *T.R.S.S.A.*, vol. ix., p. 102, No. 127.

Hab.—Victoria (E. A. Smith teste Prof. R. Tate).

Obs.—We have not yet found this species on our shores.

Genus **Barbatia**, Gray, 1840.**BARBATIA FASCIATA**, Reeve.

1844. *Arca fasciata*, Reeve. *P.Z.S. Lond.*, p. 125.
1844. *Arca fasciata*, Reeve. *Conch. Icon.*, vol. ii., pl. 15, f. 99.
1860. *Anomalocardia carpenteri*, Dunker. *Nov. Conch.*, pl. 30, f. 7-9.
1867. *Barbatia fasciata*, Angas. *P.Z.S. Lond.*, p. 931.
1878. *Arca fasciata*, T. Woods. *P.R.S. Tas.*, p. 55.
1885. *Arca (Barbatia) fasciata*, E. A. Smith. *Chall. Zool. Lamelli*, vol. xiii., p. 260.
1885. *Arca (Barbatia) radula*, E. A. Smith. *Id.*, p. 260, pl. 17, f. 3-3b.
1892. *Barbatia carpenteri*, Tate. *T.R.S.S.A.*, vol. xv., pt. 2, p. 136.
1897. *Barbatia carpenteri*, Tate. *T.R.S.S.A.*, vol. xxi., pt. 1, p. 48.

1901. *Barbatia carpenteri*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 436.

Hab.—Common in Port Phillip and generally distributed along the coast.

Obs.—It is evident that Messrs. Tate and May have become confused over *Arca trapezia*, Deshayes, and *Arca trapezina*, Lamarck; the latter is recorded from King Island by its author, and, judging from his description and from Delessert's figure, it is closely allied to *Barbatia fasciata*, Reeve, but although we have a big series showing much diversity of form and distortion, we cannot match Lamarck's species. Reeve gives a good figure of the normal form of our shell, and we fail to recognise two species as indicated by the Challenger Report. The type of *A. fasciata*, Reeve, is given as habitat unknown, and is in the Cuming Collection in the British Museum.

BARBATIA SQUAMOSA, Lamarck.

1819. *Arca squamosa*, Lamarck. Anim. S. Vert., vol. vi., pt. 1, p. 45, No. 35.
1828. *Arca squamosa*, Wood. Index. Test., Sup., p. 7, pl. 2, f. 12.
- 1835.—*Arca squamosa*, Lamarck. Anim. S. Vert. (2nd ed. Desh.), vol. vi., p. 474, No. 35.
1839. *Arca squamosa*, Lamarck. Id. (3rd ed. Deshayes and Edwards), vol. ii., p. 649, No. 35.
1843. *Arca squamosa*, Hanley. Cat. Rec. Biv. Shells, p. 158.
1865. *Barbatia* (Acar) *laminata*, Angas. P.Z.S. Lond., p. 655, No. 84.
1878. *Arca maccoyi*, T. Woods. T.R.S. Vic., vol. xiv., p. 61.
1887. *Barbatia laminata*, Tate. T.R.S. S.A., vol. ix., p. 103, No. 131.
1897. *Barbatia squamosa*, Tate. Id., vol. xxi., pt. 1, p. 48.
1901. *Barbatia squamosa*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 436.

Hab.—Common under stones in Western Port at low tide; Port Phillip; Otway Coast.

Obs.—This species is very frequently much distorted, and small forms are often relatively very tumid and solid. Messrs. Tate and May in their Tasmanian census unite *Arca pusilla*, Sowerby, with this species, but we consider it to be distinct. The type specimen of *Arca maccoyi*, T. Woods, is in the National Museum, Melbourne. The type of *Arca squamosa* is from King Island, and is in the Museum d'Historie Naturelle, Paris.

BARBATIA TRAPEZIA, Deshayes.

1840. *Arca trapezia*, Deshayes. Rev. Zool. Soc. Cuv., p. 358.
1840. *Arca trapezia*, Deshayes. Mag. de-Zool. (Guerin's), Mollusques, plate 21, 3 figures.
1844. *Arca lobata*, Reeve. Conch. Icon., vol. ii., No. 19, pl. 3, f. 19.
1844. *Arca trapezia*, Reeve. Id., in index to monograph only.
1856. *Arca trapezia*, Hanley. Cat. Rec. Biv. Shells, p. 374, pl. 18, f. 40.
1867. *Anomalocardia trapezia*, Angas. P.Z.S., p. 931, No. 121.
1887. *Barbatia trapezia*, Tate. T.R.S.S.A., vol. ix., p. 102, No. 130.
1892. *Anomalocardia trapezia*, R. Etheridge. Geo. and Pal. Queensland, p. 641, pl. 36, f. 10-12.

Hab.—Dredged alive in Western Port; Port Albert.

Obs.—Now apparently extinct in Hobson's Bay, but known living commonly to the early colonists in the neighbourhood of Port Melbourne. It is very abundant in the old estuarine deposits of the West Melbourne Swamp of Pleistocene age extending as far north as Kensington at least, and it is also commonly obtained in the dredgings for the harbour improvements.

The type of *Arca lobata*, Reeve, is in the National Museum, Melbourne, having been obtained from Reeve many years ago.

Genus **Glycimeris**, Da Costa, 1778, non Klein,
Lamarck, etc.

GLYCIMERIS FLABELLATUS, T. Woods.

1878. *Pectunculus flabellatus*, T. Woods. T.R.S. Vic., vol. xiv. pp. 61, 62.

1878. *Pectunculus laticostatus*, Angas (non Quoy and Gaimard). P.Z.S. Lond. p. 871.
1897. *Pectunculus orbicularis*, Angas. Id., p. 420, pl. 35, f. 9.
1885. *Pectunculus beddomei*, E. A. Smith. Chall. Zool., vol. xviii., p. 255, pl. 18, f. 1.1b.
1887. *Pectunculus flabellatus*, Tate. T.R.S.S.A., vol. ix., p. 103, No. 134.
1801. *Pectunculus gealei*, Tate (non Angas). T.R.S.S.A., vol. xiv., pt. 2, p. 268.
1901. *Glycymeris gealei*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 436.

Hab.—Off East Monocour Island, Bass Strait, in 38 fathoms sand and shells (Challenger). Portland (Maplestone). Victoria (T. Woods).

Obs.—The type of *P. flabellatus*, T. Woods, is in the National Museum, Melbourne. From the original figure and description of *P. gealei*, Angas, we fail to fit it on to the above species as has been done by Professor Tate.

GLYCYMERIS RADIANIS, Lamarck.

1819. *Pectunculus radians*, Lamarck. Anim. S. Vert., vol. vi., pt. 1, p. 54, No. 18.
1835. *Pectunculus radians*, Lamarck. Id. (2nd ed. Desh.), vol. vi., p. 495, No. 18.
1839. *Pectunculus radians*, Lamarck. Id. (3rd ed. Deshayes and Edwards), vol. ii., p. 656, No. 18.
1843. *Pectunculus radians*, Hanley. Cat. Rec. Biv. Shells, p. 165.
1843. *Pectunculus radians*, Reeve. Conch. Icon., vol. i., pl. 9, f. 50a, b.
1856. *Pectunculus radians*, Hanley. Cat. Rec. Biv. Shells, p. 375, pl. 19, f. 25.
1897. *Axinaea radians*, Tate. T.R.S.S.A., vol. xxi., pt. 1, p. 48.
1901. *Glycymeris radians*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 436.

Hab.—Western Port; San Remo; Portsea; Flinders, Balnarring. Port Phillip (Reeve).

Obs.—The trouble surrounding this species has been apparently due to its misidentification in South Australia (T.R.S. S.A., vol. xxi., pt. 1, 1897, p. 48) as the name of *radians* was there applied to *P. striatularis*. We believe that Reeve is correct in his determination of Lamarck's *P. radians*, and that his *P. obliquus* is really the synonym of *P. striatularis*, though perhaps a more oblique variety, but this variation is well illustrated by the series of specimens examined by us.

GLYCIMERIS STRIATULARIS, Lamarck.

1819. *Pectunculus striatularis*, Lamarck. Anim. S. Vert., vol. vi., pt. 1, p. 52, No. 13.
1835. *Pectunculus striatularis*, Lamarck. Id. (2nd. ed. Desh.), vol. vi., p. 493, No. 13.
1839. *Pectunculus striatularis*, Lamarck. Id. (3rd ed. Deshayes and Edwards), vol. ii., p. 655, No. 13.
1843. *Pectunculus striatularis*, Hanley. Cat. Rec. Biv. Shells, p. 164.
1843. *Pectunculus striatularis*, Reeve. Conch. Icon., vol. i., pl. 6, f. 27.
1843. *Pectunculus holosericus*, Reeve. P.Z.S. Lond., p. 34.
1843. *Pectunculus holosericus*, Reeve. Conch. Icon., vol. i., pl. 4, f. 18.
1843. *Pectunculus obliquus*, Reeve. Id., pl. 6, f. 33.
1867. *Axinia holosericus*, Angas. P.Z.S. Lond., p. 932.
1880. *Pectunculus striatularis*, Hutton. Man. N.Z., Moll., p. 163.
1885. *Pectunculus holosericus*, E. A. Smith. Chall. Zool., vol. xiii., p. 251.
1897. *Axinaea striatularis*, Tate. T.R.S. S.A., vol. xxi., pt. 1, p. 48.
1901. *Glycymeris striatularis*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 437.

Hab.—Port Phillip, Western Port, Shoreham, San Remo.

GLYCIMERIS AUSTRALIS, Quoy and Gaimard.

1835. *Pectunculus australis*, Quoy and Gaimard. Astrolabe, Zool., vol. iii., p. 469, pl. 77, f. 7-9.

1856. *Pectunculus grayanus*, Dunker. P.Z.S. Lond., p. 357.
1887. *Pectunculus grayanus*, Tate. T.R.S. S.A., vol. ix., p. 103, No. 135
1890. *Pectunculus grayana*, Whitelegge. P.R.S. N.S.W., vol. xxiii., p. 81, No. 168.
1898. *Axinaea kenyoniana*, Brazier. P.L.S. N.S.W., vol. xxii., p. 781.
1902. *Glycymeris australis*, Hedley. Mem. Austr. Mus., vol. iv., pt. 5, p. 299.

Hab.—Lakes Entrance, Port Albert.

Obs.—The type of *A. kenyoniana* is in the collection of Mrs. A. Kenyon, Melbourne, and has been examined by us.

Genus *Limopsis*, Sassi, 1827.

LIMOPSIS TENISONI, T. Woods.

1865. *Limopsis belcheri*, McCoy (non Adams and Reeve), A.M. N.H. (3rd ser.), vol. xvi., p. 114.
1875. *Limopsis belcheri*, McCoy (non Adams and Reeve). Prod. Pal. Vic., Dec. ii., p. , pl. 19, f. 8, 9.
1877. *Limopsis cancellata*, T. Woods (non Reeve). P.R.S. Tas., p. 156.
1878. *Limopsis tenisoni*, T. Woods. Id., p. 56.
1881. *Limopsis belcheri*, Bailey (non Adams and Reeve). Southern Science Record, vol. i., October, p. 170.
1885. *Limopsis bassi*, E. A. Smith. Chall. Zool., vol. xiii., Lamelli, p.p. 14, 256, pl. 18. f. 6-6a.
1887. *Limopsis bassii*, Tate. T.R.S. S.A., vol. ix., p. 103, No. 136.
1887. *Limopsis belcheri*, Tate (non Adams and Reeve). Id., p. 104, No. 137.
1901. *Limopsis bassi*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 437.
1902. *Limopsis tenisoni*, Hedley. Mem. Austr. Mus., vol. iv., pt. 5, p. 297.

Hab.—Off East Moncoeur Island, Bass Strait, 38 fathoms sand and shells, (Challenger). Inverloch, Flinders, San Remo, Warrnambool, Portland (Bailey). Airey's Inlet.

Obs.—This species has long wanted a thorough overhaul, and the treatment it has received by Mr. C. Hedley we are in perfect accord with, and consider that most of the difficulties surrounding it are distinctly cleared thereby.

LIMOPSIS RUBRICATA, Tate.

1887. *Limopsis rubricata*, Tate. T.R.S. S.A., vol. ix., pp. 71, 104, pl. 5, f. 6.

1901. *Limopsis rubricata*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 437.

1902.—*Limopsis rubricata*, Hedley. Mem. Austr. Mus., vol. iv., pt. 5, p. 297.

Hab.—Dredged off Rhyll, Western Port, commonly associated with Polyzoa. Ocean Beach, Point Nepean.

Obs.—We consider that the generic location of this species is somewhat unsatisfactory, but we are unable at present to suggest a more definite position.

Family MYTILIDÆ.

Genus *Mytilus*, Linnaeus, 1758.

MYTILUS PLANULATUS, Lamarck.

1819. *Mytilus planulatus*, Lamarck. Anim. S. Vert., vol. vi., pt. 1, p. 125, No. 24.

1836. *Mytilus planulatus*, Lamarck. Id. (2nd ed. Desh.), vol. vii., p. 46, No. 24.

1839. *Mytilus planulatus*, Lamarck. Id. (3rd ed. Deshayes and Edwards), vol. iii., p. 21, No. 24.

1843. *Mytilus planulatus*, Hanley. Cat. Rec. Biv. Shells, p. 249.

1876. *Mytilus tasmanicus*, T. Woods. P.R.S. Tas., p. 161.

1877. *Mytilus latus*, var, T. Woods. Id., p. 157.

1878. *Mytilus latus*, T. Woods (non Lamarck). Id., p. 54.

1878. *Mytilus tasmanicus*, T. Woods. Id., p. 54.
1897. *Mytilus planulatus*, Tate. T.R.S.S.A., vol. xxi.,
pt. 1, p. 49.
1901. *Mytilus planulatus*, Tate and May. P.L.S.N.S.W.,
vol. xxvi., pt. 3, p. 437.

Hab.—Very common in Port Phillip; Western Port; Portland (Maplestone).

Obs.—This species has hitherto been commonly known here as *Mytilus latus*, Lamarck, a New Zealand species, but an examination of the type specimen of *M. planulatus*, Lamarck, by the late Professor Tate, clearly indicates that our species must be known by that name. In Professor Tate's Revision of the South Australian Mollusca (T.R.S.S.A., vol. ix., p. 105), he refers to *M. chorus*, Molina, but subsequently in his Critical Remarks on Some Australian Mollusca (Id., vol. xxi., pt. 1. p. 49), he states that *M. planulatus* is the *M. chorus*, of his revision, but "the subordination of the name of this species to that of *M. chorus*, Molina," he "has no opinion upon, having accepted Hutton's views thereon." Professor Hutton in Appendix A to his Manual of N.Z. Mollusca, p. 202, Remarks by Dr. V. Martens, quotes him as saying of *M. dunkeri*, from Auckland, "Probably not *dunkeri*, but, in my opinion, *chorus*, Molina, which comes from Chili." In Mr. H. Suter's List of New Zealand Species in the Transactions of the N.Z. Institute, he omits any reference to either *M. dunkeri*, or *M. chorus*.

During the last few years considerable havoc has been worked on this species by the large starfish *Asterias calamaria*, which has become very common in many parts of Port Phillip.

The type of this species is from King George's Sound, and is in the Museum d'Histoire Naturelle, Paris.

MYTILUS ROSTRATUS, Dunker.

1856. *Mytilus rostratus*, Dunker. P.Z.S.Lond., p. 358.
1857. *Mytilus rostratus*, Reeve. Conch, Icon., vol. x.,
pl. 5, f. 15.
1865. *Mytilus (Aulacomya) rostratus*, Angas. P.Z.S.
Lond., p. 653, No. 67.
1887. *Mytilus rostratus*, Tate. T.R.S.S.A., vol. ix., p.
104, No. 140.

1889. *Mytilus rostratus*, Clessin. *Conch. Cab.* (ed. Kuster), p. 45, No. 22, erroneously quoted as pl. 17, f. 8, whereas it should be pl. 18, f. 7.
1901. *Mytilus rostratus*, Tate and May. *P.L.S. N.S.W.*, vol. xxvi., pt. 3, p. 437.

Hab.—Gellibrand coast to Torquay and Barwon Heads; San Remo; Kileunda, and Anderson's Inlet (W. H. Ferguson); Cape Nelson (Nat. Mus.).

Obs.—The type of this species was obtained from Tasmania, and is in the British Museum.

MYTILUS POLYDONTUS, Quoy and Gaimard.

1835. *Mytilus polyodontus*, Quoy and Gaimard. *Astrolabe, Zool.*, vol. iii., p. 462, pl. 78, f. 15, 16.
1835. *Mytilus polyodontus*, Lamarck. *Anim. S. Vert.* (2nd ed. Desh.), vol. vii., p. 49, No. 37.
1839. *Mytilus polyodontus*, Lamarck. *Id.* (3rd ed. Deshayes and Edwards), vol. iii., p. 22, No. 37.
1857. *Mytilus menkeanus*, Reeve. *Conch. Icon.*, vol. x., pl. 7, f. 26.
1865. *Mytilus (Aulacomya) menkeanus*, Angas. *P.Z.S. Lond.*, p. 653, No. 66.
1880. *Mytilus polyodontes*, Hutton. *Man. N.Z., Moll.* p. 167.
1887. *Mytilus menkeanus*, Tate. *T.R.S. S.A.*, vol. ix., p. 105, No. 141.
1889. *Mytilus menkeanus*, Clessin. *Conch. Cab.* (ed. Kuster), p. 38, No. 12, pl. 10, f. 3, 4.
1897. *Mytilus polydotes*, Tate. *T.R.S. S.A.*, vol. xxi., pt. 1, p. 49.

Hab.—San Remo; Polwarth Coast; Portland (Nat. Mus.).

Obs.—Type from New Holland in the Cuming Collection in the British Museum.

MYTILUS HIRSUTUS, Lamarck.

1819. *Mytilus hirsutus*, Lamarck. *Anim. S. Vert.*, vol. vi., pt. 1, p. 120, No. 5.
1836. *Mytilus hirsutus*, Lamarck. *Id.* (2nd ed. Desh.), vol. vii., p. 38, No. 5.

1839. *Mytilus hirsutus*, Lamarck. Id. (3rd ed. Deshayes and Edwards), vol. iii., p. 19, No. 5.
1843. *Mytilus hirsutus*, Hanley. Cat. Rec. Biv. Shells, p. 244.
1865. *Mytilus* (*Aulacomya*) *hirsutus*, Angas. P.Z.S. Lond., p. 652, No. 65.
1867. *Mytilus* (*Aulacomya*) *hirsutus*, Angas. Id., p. 928, No. 105.
1878. *Mytilus hirsutus*, T. Woods. P.R.S. Tas., p. 54.
1882. *Mytilus hirsutus*, Dunker. Ind. Moll. Japon, p. 222.
1885. *Mytilus hirsutus*, E. A. Smith. Chall. Zool., vol. xiii., Lam., p. 273.
1887. *Mytilus hirsutus*, Tate. T.R.S. S.A., vol. ix., p. 104, No. 139.
1889. *Mytilus hirsutus*, Clessin. Conch. Cab., p. 40, No. 15, pl. 7, f. 6.

Hab.—Polwarth coast; Kileunda (W. H. Ferguson).

Genus *Modiola*, Lamarck, 1799.

MODIOLA ATER, Zelebor.

1866. *Mytilus ater*, Zelebor. Verhand. der Zool.-bot. Gesell. Wien, p. 914.
1868. *Mytilus ater*, Frauenfeld. Reise, Novara, vol. vi., p. 16, pl. 2, f. 29, 30.
1871. *Perna confusa*, Angas. P.Z.S. Lond., p. 21, pl. 1, f. 33.
1873. *Mytilus ater*, Hutton. Cat. Moll. N.Z., p. 78, No. 100.
1877. *Mytilus crassus*, T. Woods. P.R.S. Tas., p. 157, No. 78.
1878. *Mytilus crassus*, T. Woods. Id., p. 55.
1880. *Mytilus ater*, Hutton. Man. N.Z., Moll., p. 167 and p. 202.
1887. *Mytilus ater*, Tate. T.R.S. S.A., vol. ix., p. 105, No. 142.
1889. *Mytilus ater*, Clessin. Conch. Cab., p. 62, No. 38, pl. 7, f. 5.

1901. *Modiola confusa*, Tate and May. P.L.S. N.S.W.,
vol. xxvi., pt. 3, p. 438.
1901. *Mytilus ater*, Tate and May. Id., p. 452.
1901. *Volsella ater*, Suter. Trans. N.Z. Inst., vol. xxxiv.,
p. 223.

Hab.—Coast generally.

Obs.—The smaller dwarfed form of the *M. crassa* type exceedingly common on the rocks between tide marks at several localities, especially Back Beach, Sorrento, the larger form being obtained inside the various bays and estuaries, the latter form occurring up the Saltwater River as far as Maribyrnong, a distance of about 10 miles. The difference in habitat of these two forms, the one on exposed rocky shores, the other on muddy river banks and estuaries, frequently in clumps, attached to reeds, might be taken as probably indicating two species, but the forms are so variable that it has seemed best to take the whole as one species.

MODIOLA INCONSTANS, Dunker.

1856. *Volsella inconstans*, Dunker. P.Z.S. Lond., p. 363.
1887. *Modiola semivestita*, Tate (non Dunker). T.R.S.
S.A., vol. ix., p. 106, pl. 5, f. 16a, b.
1889. *Modiola inconstans*, Clessin. Conch. Cab., p.
127, No. 55.
1901. *Modiola inconstans*, Tate and May. P.L.S.
N.S.W., vol. xxvi., pt. 3, p. 438.

Hab.—Hobson's Bay, Williamstown, Sandringham, Portarlington, Corio Bay.

Obs.—This species, though fairly consistent in shape, is somewhat variable in colour, from a uniform light brown to a blue-black, and occasionally parti-coloured.

MODIOLA ALBICOSTA, Lamarck.

1819. *Modiola albicosta*, Lamarck. Anim. S. Vert., vol.
vi., pt. 1, p. 111, No. 3.
1836. *Modiola albicosta*, Lamarck. Id. (2nd ed. Desh.),
vol. vii., p. 19, No. 3.
1839. *Modiola albicosta*, Lamarck. Id. (3rd ed. De-
shayes and Edwards), vol. iii., p. 12, No. 3.

1841. *Modiola albicosta*, Delessert. Recueil de Coq., pl. 13, f. 8.
1843. *Modiola albicosta*, Hanley. Cat. Rec. Biv. Shells, p. 234.
1857. *Modiola albicosta*, Reeve. Conch. Icon., vol. x., pl. 2, f. 7.
1862. *Modiola albicosta*, Chenu. Man. de Conch., vol. ii., p. 154, f. 758.
1878. *Modiola albicostata*, T. Woods. P.R.S. Tas., p. 55.
1887. *Modiola albicosta*, Tate. T.R.S. S.A., vol. ix., p. 105, No. 145.
1889. *Modiola albicosta*, Clessin. Conch. Cab., p. 96, pl. 28, f. 6, not pl. 5, f. 5.
1902. *Modiola albicosta*, Hedley. Mem. Austr. Mus., vol. iv., pt. 5, p. 311.

Hab.—Portsea, Port Phillip; Shoreham, Western Port.

MODIOLA AUSTRALIS, Gray.

1827. *Modiola australis*, Gray. App. to King's Voyage, vol. ii., p. 477.
1843. *Modiola australis*, Hanley. Cat. Rec. Biv. Shells, p. 235.
1857. *Modiola australis*, Reeve. Conch. Icon., vol. x., pl. 5, f. 21.
1865. *Perna australis*, Angas. P.Z.S. Lond., p. 653, No. 70.
1867. *Perna australis*, Angas. Id., p. 929, No. 109.
1878. *Modiola australis*, T. Woods. P.R.S. Tas., p. 55.
1887. *Modiola australis*, Tate. T.R.S. S.A., vol. ix., p. 105, No. 144.
1889. *Modiola australis*, Clessin. Conch. Cab., p. 99, No. 9, pl. 29, f. 1, 2 misquoted, should be f. 3, 4.
1897. *Modiola australis*, Tate. Id., vol. xxi., pt. 1, p. 49.
1901. *Modiola australis*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 438.
1902. *Modiola australis*, Hedley. Mem. Austr. Mus., vol. iv., pt. 5, p. 311.

Hab.—Common Port Phillip and Western Port. Portland (Maplestone), Kileunda, and Anderson's Inlet (W. H. Ferguson).

Obs.—The hirsute character of this shell readily distinguishes it from our other species of *Modiola*.

MODIOLA ARBORESCENS, Chemnitz.

1795. *Mytilus arborescens*, Chemnitz. *Conch. Cab.*, vol. xi., p. 251, pl. 198, f. 2016, 2017.
1819. *Modiola picta*, Lamarck. *Anim. S. Vert.*, vol. vi., pt. 1, p. 112, No. 8.
- ? 1822. *Modiola picta*, Sowerby. *Genera*, vol. ii., pl. 99, f. 1.
1825. *Mytilus arborescens*, Wood. *Index. Test.*, p. 57, pl. 16, f. 13.
1838. *Modiola picta*, Lamarck. *Anim. S. Vert* (2nd ed. Desh.), vol. vii., p. 21, N. 8.
1839. *Modiola picta*, Lamarck. *Id.* (3rd. ed. Deshayes and Edwards), vol. iii., p. 12, No. 8.
1843. *Modiola arborescens*, Hanley. *Cat. Rec. Biv. Shells*, p. 237.
1855. *Modiola arborescens*, Hanley. *Index Test.* (2nd ed.), p. 67, sp. 13, pl. 12, f. 13.
1857. *Modiola arborescens*, Reeve. *Conch. Icon.*, vol. x., pl. 6, f. 30.
1857. *Perna arborescens*, H. and A. Adams. *Genera Rec. Moll.*, vol. ii., p. 516.
1878. *Modiola arborescens*, T. Woods. *P.R.S. Tas.*, p. 55.
1862. *Modiola arborescens*, Chenu. *Man. de. Conch.*, vol. ii., p. 154, f. 757.
1887. *Modiola arborescens*, Clessin. *Conch. Cab.* (ed. Kuster), p. 100, pl. 29, f. 10.
1891. *Modiola arborescens*, Tate. *T.R.S. S.A.*, vol. xiv., p. 268.
1893. *Modiola arborescens*, Brazier. *P.L.S. N.S.W.* (2nd ser.), vol. viii., pt. 3, pp. 434, 435.
1902. *Modiola arborescens*, Hedley. *Mem. Austr. Mus.*, vol. iv., pt. 5, p. 311.

Hab.—Dredged 6 to 8 fathoms off Rhyll, Western Port.

MODIOLA VEXILLUM, Reeve.

Volsella picta, Dunker m.s. (non Lamarck).

1857. *Modiola vexillum*, Reeve. *Conch. Icon.*, vol. x.,
pl. 8, f. 40.
1889. *Modiola vexillum*, Clessin. *Conch. Cab.* (ed.
Kuster), p. 125, No. 53, pl. 25, f. 12.
1901. *Modiolaria vexillum*, Tate and May. *P.L.S.*
N.S.W., vol. xxvi., pt. 3, p. 438.

Hab.—Port Melbourne.

MODIOLA VICTORIAE, Pritchard and Gatliff.

1903. *Modiola victoriae*, Pritchard and Gatliff. *P.R.S.*
Vic., vol. xvi. n.s., pt. 1, p. 93, pl. xv., f. 1, 2.

Hab.—Dredged alive from about 6 fathoms off Rhyll, Phillip
Island, Western Port.

Obs.—A species characterised by its regular tumidity and re-
markably uniform height.

Genus **Modiolaria**, Loven, 1846.

MODIOLARIA IMPACTA, Herman.

- Mytilus impacta*, Herman. *Naturforscher*, vol.
xvii., pl. 3, f. 5-8.
- Modiola discors*, Lamarck. *Encyc. Meth.*, pl. 204,
f. 5a, b.
1819. *Modiola discors*, Lamarck. *Anim. S. Vert.*, vol.
vi., pt. 1, p. 114, No. 16.
1825. *Mytilus impactus*, Wood. *Index. Test.*, p. 59, No.
40, pl. 12, f. 40.
1836. *Modiola discors*, Lamarck. *Anim. S. Vert.* (2nd
ed. Desh.), vol. vii., p. 23, No. 16.
1839. *Modiola discors*, Lamarck. *Id.* (3rd ed. Deshayes
and Edwards), vol. iii., p. 13, No. 16.
1843. *Modiola impacta*, Hanley. *Cat. Rec. Biv. Shells*,
p. 241.
1857. *Modiola impacta*, Reeve. *Conch. Icon.*, vol. x.,
sp. 50, pl. 9, f. 64.

1873. *Crenella discors*, Hutton. *Cat. Moll. N.Z.*, p. 78, No. 101.
 1880. *Crenella impacta*, Hutton. *Man. N.Z., Moll.*, p. 168.
 1884. *Modiola impacta*, Tryon. *Struct. and Syst. Conch.*, vol. iii., p. 264, pl. 128, f. 99.
 1889. *Modiolaria impacta*, Clessin. *Conch. Cab.* (ed. Kuster), p. 147, No. 10, pl. 34, f. 9.

Hab.—San Remo.

MODIOLARIA BARBATA, Reeve.

1858. *Lithodomus barbatus*, Reeve. *Conch. Icon.*, vol. x., No. 27, pl. 5, f. 27.
 1858. *Lithodomus laniger*, Reeve. *Id.*, f. 30.
 1867. *Modiolaria barbata*, Angas. *P.Z.S. Lond.*, p. 911, pl. 44, f. 12.
 1867. *Crenella (Modiolaria) barbata*, Angas. *Id.*, p. 929, No. 108.
 1878. *Crenella barbata*, Angas. *Id.*, p. 871, No. 69.
 1883. *Modiolaria barbata*, Brazier. *P.L.S. N.S.W.*, vol. viii., p. 233.
 1885. *Modiolaria lanigera*, E. A. Smith. *Chall. Zool.*, vol. xiii., p. 278.
 1894. *Modiolaria barbata*, Brazier. *Id.* (2nd ser.), vol. ix., p. 181, No. 149.

Hab.—San Remo ; Ocean Beach, Point Nepean

MODIOLARIA PAULUCCIAE, Crosse.

1863. *Crenella paulucciae*, Crosse. *Jour. de. Conch.*, p. 89, pl. 1, f. 8.
 1887. *Modiolaria paulucciae*, Tate. *T.R.S. S.A.*, vol ix., p. 106, No. 149.

Hab.—Ocean Beach, Point Nepean.

MODIOLARIA CUNEATA, Gould.

1861. *Modiolaria cuneata*, Gould. *Proc. Bost. Soc. Nat. Hist.*, vol. viii., p. 38.
 1885. *Modiolaria cuneata*, E. A. Smith. *Chall. Zool.*, vol. xiii., Lamelli, p. 278, pl. 16, f. 7, 7a.

Hab.—Common Port Phillip, associated with tunicates, Carum to Frankston. Portsea.

Family PHILOBRYIDAE.

Genus *Philobrya*, Carpenter.

PHILOBRYA CREMATULIFERA, Tate.

1892. *Myrina crenatulifera*, Tate. T.R.S.S.A., vol. xv., pt. 2, p. 131, pl. 1, f. 11, 11a.

1898. *Philobrya crenatulifera*, Tate. Id., vol. xxii., pt. 2, p. 87.

1901. *Philobrya crenatulifera*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 3, p. 439.

1902. *Philobrya crenatulifera*, Hedley. Id., vol. xxvii., pt. 1, p. 17.

Hab.—Type from South Australia (coll. by A. Adcock, probably in Tate Collection), Victoria, Barwon Heads (T. S. Hall); Flinders, Western Port (G. B. Pritchard), not Flinders Island, as recorded by Professor R. Tate.

PHILOBRYA FIMBRIATA, Tate.

1898. *Philobrya fimbriata*, Tate. T.R.S.S.A., vol. xxii., pt. 2, p. 87, pl. 4, f. 8.

Hab.—Victoria, dredged seven to nine fathoms at Port Phillip Heads by the late J. Bracebridge Wilson. (In Tate Collection.)

PHILOBRYA, sp.

Hab.—Western Port.

Family PTERIIDAE.

Genus *Pteria*, Scopoli, 1777.

PTERIA PAPILIONACEA, Lamarck.

Avicula papilionacea, Lamarck. Encyc. Meth., pl. 177, f. 5.

1819. *Avicula papilionacea*, Lamarck. Anim. S. Vert., vol. vi., pt. 1, p. 149, No. 10.

1835. *Avicula georgiana*, Quoy and Gaimard. *Astro-*
labe, Zool., vol. iii., p. 457, pl. 77, f. 10, 11.
1836. *Avicula papilionacea*, Lamarck. *Anim. S. Vert.*,
 (2nd. ed. Desh.), vol. vii., p. 100, No. 10.
1839. *Avicula papilionacea*, Lamarck. *Id.*, *Anim. S.*
Vert. (3rd ed. Deshayes and Edwards), vol. iii.,
 p. 40, No. 10.
1843. *Avicula papilionacea*, Hanley. *Cat. Rec. Biv.*
Shells, p. 262.
1843. *Avicula georgina*, Hanley. *Id.*, p. 263.
1857. *Avicula rutila*, Reeve. *Conch. Icon.*, vol. x., pl. 8,
 f. 19.
1857. *Avicula pulchella*, Reeve. *Id.*, f. 22.
1857. *Avicula scalpta*, Reeve. *Id.*, pl. 11, f. 38.
1857. *Avicula punctulata*, Reeve. *Id.*, pl. 12, f. 42.
1865. *Avicula scalpta*, Angas. *P.Z.S. Lond.*, p. 654,
 No. 74.
1865. *Avicula pulchella*, Angas. *Id.*, No. 75.
1865. *Avicula rutila*, Angas. *Id.*, No. 76.
1865. *Avicula punctulata*, Angas. *Id.*, No. 77.
1867. *Avicula pulchella*, Angas. *Id.*, p. 930, No. 113.
1878. *Avicula pulchella*, T. Woods. *P.R.S. Tas.*, p. 55.
1887. *Avicula georgiana*, Tate. *T.R.S. S.A.*, vol. ix., p.
 107, No. 153.
1897. *Avicula papilionacea*, Tate. *Id.*, vol. xxi., pt. 1,
 p. 49.
1901. *Pteria papilionacea*, Tate and May. *P.L.S. N.S.W.*,
 vol. xxvi., pt. 3, p. 439.

Hab.—Very common along the coast, generally attached to seaweed.

Genus *Meleagrina*, Lamarck, 1799.

MELEAGRINA MARGARITIFERA, Linnaeus.

Mytilus margaritiferus, Linnaeus. *Syst. Nat.*, p.
 1153, pl. 221, f. 56.

1819. *Meleagrina margaritifera*, Lamarck. *Anim. S.*
Vert., vol. vi., pt. 1, p. 151, No. 1.

1825. *Mytilus margaritiferus*, Wood. Index Test., p. 56, pl. 12, f. 4.
1835. *Meleagrina margaritifera*, Lamarck. Anim. S. Vert. (2nd ed. Desh.), vol. vii., p. 107, No. 1.
1839. *Meleagrina margaritifera*, Lamarck. Id. (3rd ed. Deshayes and Edwards), vol. iii., p. 43, No. 1.
1843. *Meleagrina margaritifera*, Hanley. Cat. Rec. Biv. Shells, p. 264.
1865. *Margaritifera margaritifera*, Angas. P.Z.S. Lond., p. 654, No. 78.
1887. *Meleagrina margaritifera*, Tate. T.R.S.S.A., vol. ix., p. 107, No. 154.

Hab.—Barwon Heads (T. S. Hall).

Genus *Vulsella*, Lamarck, 1799.

VULSELLA LINGULATA, Lamarck.

1819. *Vulsella lingulata*, Lamarck. Anim. S. Vert., vol. vi., pt. 1, p. 221.
1819. *Vulsella ovata*, Lamarck, Id., p. 222, No. 6.
Vulsella lingulata, Sowerby. Genera, vol. i., plate and figure.
1825. *Ostrea vulsella*, Wood. Index Test., p. 53, pl. 11, f. 84.
1827. *Vulsella lingulata*, Crouch. Intro. Lamarck's Conch., p. 21.
1828. *Vulsella lingulata*, Wood. Index Test., app. p. 59.
1836. *Vulsella lingulata*, Lamarck. Anim. S. Vert. (2nd ed. Desh.), vol. vii., p. 267, No. 1.
1836. *Vulsella ovata*, Lamarck. Id., p. 268, No. 6.
1839. *Vulsella lingulata*, Lamarck. Id. (3rd ed. Deshayes and Edwards), vol. iii., p. 99, No. 1.
1839. *Vulsella ovata*, Lamarck. Id., p. 100, No. 6.
1856. *Vulsella lingulata*, Hanley. Cat. Rec. Biv. Shells, p. 310.
1856. *Vulsella ovata*, Hanley. Id., pp. 311, 389, pl. 24, f. 49.
1858. *Vulsella tasmanica*, Reeve. Conch. Icon., vol. xi., pl. 1, f. 3.

1858. *Vulsella limaeformis*, Reeve. *Id.*, pl. 2, f. 10a, b.
 1858. *Vulsella rudis*, Reeve. *Id.*, pl. 2, f. 12.
 1878. *Vulsella tasmanica*, T. Woods. *P.R.S. Tas.*, p. 55.
 1887. *Vulsella ovata*, Tate. *T.R.S. S.A.*, vol. ix., p. 107,
 No. 152.
 1899. *Vulsella lingulata*, Melville and Standen. *Jour.*
Lin. Soc. Lond., p. 184, No. 279.

Hab.—Western Port; Port Phillip; Polwarth coast; C. Otway; Warrnambool; Portland (Maplestone).

Genus *Malleus*, Lamarck, 1799.

MALLEUS ALBUS, Lamarck.

1819. *Malleus albus*, Lamarck. *Anim. S. Vert.*, vol. vi.,
 pt. 1, p. 144, No. 1.
 1836. *Malleus albus*, Lamarck. *Id.* (2nd ed. Desh.), vol.
 vii., p. 91, No. 1.
 1839. *Malleus albus*, Lamarck. *Id.* (3rd ed. Deshayes
 and Edwards), vol. iii., p. 37, No. 1.
 1843. *Malleus albus*, Hanley. *Cat. Rec. Biv. Shells*, p.
 260.
 1856. *Malleus albus*, Hanley. *Id.*, p. 388, pl. 24, f. 38.
 1858. *Malleus albus*, Reeve. *Conch. Icon.*, vol. xi., pl. 1,
 f. 1.

Hab.—Gippsland coast (T. Worcester).

Obs.—We think it probable that this is the shell regarded by Professor Tate as *M. vulsellatus*, Lamarck, which he regards as correctly named for South Australian examples. Should this be so, numerous synonyms will have to be taken into consideration under the above species, *M. albus*, Lamarck.

Family PINNIDAE.

Genus *Pinna*, Linnaeus, 1758.

PINNA TASMANICA, T. Woods.

1876. *Pinna tasmanica*, T. Woods. *P.R.S. Tas.*, p. 161.

1885. *Pinna tasmanica*, E. A. Smith. Chall. Zool., vol. xiii., Lamelli, p. 33.

1901. *Pinna tasmanica*, Tate and May. P.L.S. N.S.W., vol. xxvi., pt. 1, p. 440.

Hab.—Off East Moncoeur Islands, Bass Straits, in 38 fathoms sand and shells (Challenger). Off Lakes Entrance (T. S. Hart). Western Port. Off Sorrento, Port Phillip.

Family SPONDYLIDAE.

Genus *Spondylus*, Linnaeus, 1758.

SPONDYLUS TENELLUS, Reeve.

1856. *Spondylus tenellus*, Reeve. Conch. Icon., vol. ix., pl. 18, f. 67.

1878. *Spondylus tenellus*, T. Woods. P.R.S. Tas., p. 57.

1887. *Spondylus tenellus*, Tate. T.R.S. S.A., vol. ix., p. 109, No. 164.

1901. *Spondylus tenellus*, Tate and May, P.L.S. N.S.W., vol. xxvi., pt. 3, p. 440.

Hab.—Western Port. Portland (Maplestone), Phillip Island (Nat. Mus.).

Family LIMIDAE.

Genus *Lima*, Bruguière, 1792.

LIMA MULTICOSTATA, Sowerby.

1843. *Lima multicostata*, Sowerby. Thes. Conch., vol. i., p. 85, sp. 6., pl. 22, f. 38.

1843. *Lima multicostata*, Hanley. Cat. Rec. Biv. Shells, p. 266.

1865. *Radula lima*, Angas. P.Z.S. Lond., p. 656, No. 91.

1872. *Lima multicostata*, Sowerby in Reeve. Conch. Icon., vol. xviii., pl. 1, f. 4.

1878. *Radula lima*, T. Woods. P.R.S. Tas., p. 56.

1885. *Lima multicostata*, E. A. Smith. *Chall Zool.*,
vol. xiii., Lamelli, p. 288.
1887. *Lima multicostata*, Tate. *T.R.S. S.A.*, vol. ix., p.
108, No. 160.
1901. *Lima multicostata*, Tate and May. *P.L.S.*
N.S.W., vol. xxvi., pt. 3, p. 440.
1902. *Lima lima* var. *multicostata*, Hedley. *Mem.*
Austr. Mus., vol. iv., pt. 5, p. 309.

Hab.—Cowes, Western Port.

LIMA (LIMATULA) BULLATA, Born.

1780. *Ostrea bullata*, Born. *Mus. Caes. Vindobon*, p.
110, pl. 6, f. 8.
1817. *Ostrea bullata*, Dillwyn. *Desc. Cat.*, p. 270.
1843. *Lima bullata*, Sowerby. *Thes. Conch.*, vol. i., p. 84,
pl. 20, f. 32, 33.
1843. *Lima bullata*, Hanley. *Cat. Rec. Biv. Shells*, p.
266.
1865. *Radula (Limatula) bullata*, Angas. *P.Z.S. Lond.*,
p. 656, No. 93.
1872. *Lima bullata*, Sowerby in Reeve. *Coch. Icon.*,
vol. xviii., pl. 1, f. 3a, b.
1872. *Lima strangei*, Sowerby. *Id.*, pl. iii., f. 15.
1884. *Lima (Limatula) bullata*, Tryon. *Struct. and Syst.*
Conch. vol. iii., p. 287, pl. 132, f. 93.
1885. *Lima (Limatula) bullata*, E. A. Smith. *Chall.*
Zool., vol. xiii., Lamelli, p. 292.
1887. *Lima bullata*, Tate. *T.R.S. S.A.*, vol. ix., p. 109,
No. 162.
1901. *Lima (Limatula) bullata*, Tate and May. *P.L.S.*
N.S.W. vol. xxvi., pt. 3, p. 440.
1902. *Lima bullata*, Hedley. *Mem. Austr. Mus.*, vol. iv.,
pt. 5, p. 310.

Hab.—Dredged alive off Rhyll, Western Port. Portsea to
Rye, Port Phillip. Off E. Moncoeur Island, Bass Strait
(Challenger).

LIMA, sp.

Hab.—Port Fairy, and San Remo.

Obs.—This species we have not yet been able to identify.

Family ANOMIIDAE.

Genus *Placunanomia*, Brodrip, 1832.

PLACUNANOMIA IONE, Gray.

1849. *Placunanomia ione*, Gray. P.Z.S. Lond., p. 123.
1850. *Placunanomia ione*, Gray. B.M. Cat. Biv. Moll.,
pt. 1, p. 13, No. 10.
1859. *Placunanomia ione*, Reeve. Conch. Icon., vol. xi.,
pl. 2, f. 6a, b, c.
1867. *Placunanomia (Monia) ione*, Angas. P.Z.S. Lond.,
p. 933, No. 132.
1873. *Placunanomia ione*, Hutton. Cat. Mar. Moll. N.Z.,
p. 84.
1880. *Placunanomia ione*, Hutton. Man. N.Z., Moll.,
p. 174.
1886. *Placunanomia ione*, Tate. T.R.S. S.A., vol. viii.,
p. 101.
1887. *Placunanomia ione*, Tate. Id., vol. ix., p. 109,
No. 165.

Hab.—Western Port.

Family PECTENIDAE.

Genus *Pecten*, Lamarck, 1799.

PECTEN MEDIUS, Lamarck.

1819. *Pecten medius*, Lamarck. Anim. S. Vert., vol. vi.,
pt. 1, p. 163, No. 2.
1835. *Pecten laticostatus*, Gray (non Lamarck). Yate's
New Zealand, p. 310.
1836. *Pecten medius*, Lamarck. Anim. S. Vert. (2nd ed.
Desh.), vol. vii., p. 130, No. 2.
1839. *Pecten medius*, Lamarck. Id. (3rd ed. Deshayes
and Edwards), vol. iii., p. 51, No. 2.
1842. *Pecten fuscus*, Sowerby. Thes. Conch., vol. i., p.
47, pl. 16, f. 118, 119.
1842. *Pecten medius*, Sowerby. Id., pl. 15, f. 102-104,
pl. 18, f. 117, 118.

1843. *Pecten laticostatus*, Gray (non Lamarck), in Diefenbach's *New Zealand*, vol. ii., p. 260.
1852. *Pecten fumatus*, Reeve. *Conch. Icon.*, vol. viii., pl. 7, f. 32.
1852. *Pecten novaezelandiae*, Reeve. *Id.*, pl. 8, f. 36.
1852. *Pecten filusus*, Reeve. *Id.*, pl. 11, f. 42.
1852. *Pecten medius*, Reeve. *Id.*, pl. 11, f. 44.
1856. *Pecten laticostatus*, Hanley (non Lamarck). *Cat. Rec. Biv. Shells*, p. 287.
1865. *Vola laticostata*, Angas. *P.Z.S. Lond.*, p. 656, No. 90.
1867. *Vola fumata*, Angas. *P.Z.S. Lond.*, p. 933, No. 129.
1880. *Pecten laticostatus*, Hutton (non Lamarck). *Man. N.Z., Moll.*, p. 171.
1885. *Pecten (Janira) fumatus*, E. A. Smith. *Chall. Zool.*, vol. xiii., Lamelli, p. 307.
1887. *Pecten meridionalis*, Tate. *P.R.S. Tas.*, p. 114.
1887. *Pecten fumatus*, var *albus*, Tate. *Id.*, p. 113.
1902. *Pecten medius*, Hedley. *Mem. Austr. Mus.*, vol. iv., pt. 5, pp. 303, 304.

Hab.—Common on weedy banks, Port Phillip and Western Port. Gippsland coast.

Obs.—*Pecten bifidus* (Menke, *Moll. Nov. Holl.*, p. 35) we have omitted from the above, as we believe that it falls in with *P. modestus*, Reeve, which on the material at present available to us, we retain as a distinct species. Hanley as far back as 1856, in his *Catalogue of Recent Bivalve Shells*, page 287, suggests that *P. laticostatus*, Gray, *P. bifidus*, and *P. medius* are one and the same, for he states, "*P. laticostatus*, Gray, is the *bifidus* of Phillippins *Conchylien*, and judging from the description of Deshayes in the third vol. of the *Encyc. Methodique*, the *medius* of Lamarck." G. F. Angas also has remarked on the close alliance between *Pecten laticostatus*, Gray,, and *P. medius*, Lamarck, in his reference, which we quote above. Perry's *P. concavum* (*Conchology*, pl. 55, f. 1), may probably represent this species, in which case his name has priority, but his specimen is recorded as from the Red Sea, and his figure is too unsatisfactory for definite determination.

Genus *Chlamys*, Bolten, 1798.

CHLAMYS UNDULATUS, Sowerby.

1842. *Pecten undulatus*, Sowerby. *Thes. Conch.*, vol. i.,
p. 60, pl. 19, f. 206, 207.
1843. *Pecten undulatus*, Hanley. *Cat. Rec. Biv. Shells*,
p. 276.
1853. *Pecten undulatus*, Reeve. *Conch. Icon.*, vol. viii.,
pl. 20, f. 73.
1876. *Pecten maria*e, T. Woods. *P.R.S. Tas.*, p. 158.
1886. *Pecten undulatus*, E. A. Smith. *Chall. Zool.*, vol.
xiii., Lamelli, p. 299.
1901. *Pecten undulatus*, Tate and May. *P.L.S. N.S.W.*,
vol. xxvi., pt. 3, p. 441.

Hab.—Off East Moncoeur Island, Bass Strait, in 38 fathoms
(Challenger). Port Albert. Dredged off Rhvll, Western Port.
Port Phillip Bay (R. Tate).

CHLAMYS BIFRONS, Lamarck.

1819. *Pecten bifrons*, Lamarck. *Anim. S. Vert.*, vol.
vi., pt. 1., p. 164, No. 4.
1836. *Pecten bifrons*, Lamarck. *Id.* (2nd ed. Desh.),
vol. vii., p. 131, No. 4.
1839. *Pecten bifrons*, Lamarck. *Id.* (3rd ed. Deshayes
and Edwards), vol. iii., p. 51, No. 4.
1841. *Pecten bifrons*, Delessert. *Recueil de Coq.*, pl. 15,
f. 5a, b. c.
1842. *Pecten bifrons*, Sowerby. *Thes. Conch.*, vol i.,
p. 54, No. 26, pl. 12, f. 9, 10.
1843. *Pecten bifrons*, Hanley. *Cat. Rec. Biv. Shells*,
p. 273.
1853. *Pecten bifrons*, Reeve. *Conch. Icon.*, vol. viii.,
pl. 12, f. 45.
1863. *Pecten tasmanicus*, Adams and Angas. *P.Z.S.*
Lond., p. 428, No. 13, pl. 37, f. 21a, b.
1865. *Pecten (Chlamys) bifrons*, Angas. *P.Z.S. Lond.*,
p. 656, No. 89.
1887. *Pecten bifrons*, Tate. *T.R.S. S.A.*, vol. ix., p. 108,
No. 158.

1901. *Pecten bifrons*, Tate and May. P.L.S. N.S.W.,
vol. xxvi., pt. 3, p. 440.

Hab.—San Remo, Western Port. Portland (Maplestone).

Obs.—This species shows considerable variation, and we think it probable that a full series will necessitate the inclusion with it of the foregoing species, *P. undulatus*, for both *P. tasmanicus*, Adams and Angas, and *P. mariae*, T. Woods, show such intermediate characters as to point strongly in this direction.

CHLAMYS ASPERRIMUS, Lamarck.

1819. *Pecten asperrimus*, Lamarck. Anim. S. Vert., vol.
vi., pt. 1, p. 174, No. 43.
1828. *Ostrea asperrimus*, Wood. Index Test. Sup., p.
47, pl. 2, f. 1.
1836. *Pecten asperrimus*, Lamarck. Anim. S. Vert.
(2nd ed. Desh.), vol. vii., p. 145, No. 43.
1839. *Pecten asperrimus*, Lamarck. Id. (3rd ed. Des-
hayes and Edwards), vol. iii., p. 56, No. 43.
1841. *Pecten asperrimus*, Delessert. Recueil de Coq.,
pl. 15, f. 1a, b.
1842. *Pecten asperrimus*, Sowerby. Thes. Conch., vol.
i., p. 75, No. 94, pl. 17, f. 156-158.
1842. *Pecten australis*, Sowerby. Id., p. 76, pl. 19,
f. 210, 220.
1843. *Pecten asperrimus*, Hanley. Cat. Rec. Biv.
Shells, p. 284.
1843. *Pecten australis*, Hanley. Id., p. 285.
1853. *Pecten asperrimus*, Reeve. Conch. Icon., vol. viii.,
pl. 20, f. 75.
1853. *Pecten australis*, Reeve. Id., pl. 25, f. 103a, b.
1865. *Pecten australis*, Angas. P.Z.S. Lond., p. 656,
No. 88.
1878. *Pecten asperrimus*, T. Woods. P.R.S. Tas., p. 56.
1880. *Pecten australis*, Hutton. Man. N.Z., Moll. p.
171.
1885. *Pecten asperrimus*, E. A. Smith. Chall. Zool.,
vol. xiii., Lamelli, p. 294.
1887. *Pecten asperrimus*, Tate. T.R.S. S.A., vol. ix., p.
108, No. 155.

Hab.—Coast generally, our commonest species.

Obs.—Menke in his *Moll. Nov. Holl.*, p. 36, gives priority to *P. rubidus*, Marytn, for this species, and refers to *Univ. Conch.*, vol. 4, pl. 133, fig. *sinistr.*, but we have been unable to gain access to this work, and cannot therefore at present decide the point. We think it likely that *P. sentis*, Reeve, *Conch. Icon.*, vol. viii., pl. 29, f. 125, represents a young specimen of *P. asperrimus*.

CHLAMYS AKTINOS, Petterd.

1886. *Pecten aktinos*, Petterd. *P.R.S. Tas.*, p. 320.
1887. *Pecten bednalli*, Tate. *T.R.S. S.A.*, vol. ix., p. 73,
pl. 4, f. 3.
1900. *Chlamys bednalli*, Hedley. *P.L.S.N.S.W.*, vol. xxv.,
pt. 3, p. 495, pl. 25, f. 10-13.
1901. *Pecten aktinos*, Tate and May. *Id.*, vol. xxvi., pt.
3, p. 441.

Hab.—Sorrento, Port Phillip; Storeham, and dredged off
Rhyll. Western Port.

CHLAMYS HEDLEYI, Dautzenberg.

1900. *Chlamys fenestrata*, Hedley (non Forbes). *P.L.S.
N.S.W.*, vol. xxv., pt. 4, p. 730, pl. 48, f. 17 19.
1901. *Chlamys hedleyi*, Dautzenberg. *Jour. de Conch.*,
vol. xlix., p. 348.
1902. *Chlamys fenestrata*, Hedley. *Mem. Austr. Mus.*,
vol. iv., pt. 5, p. 307.

Hab.—Ocean Beach, Point Nepean; Torquay.

Obs.—The specimens of this species we have hitherto obtained are all small young shells, and have been identified for us by Mr. Hedley as the young of his species.

Genus *Cyclopecten*, Verrill.

CYCLOPECTEN NEPEANENSIS, Pritchard and Gatliff.

1904. *Cyclopecten nepeanensis*, Pritchard and Gatliff.
[See Article XI., pl. 20, f. 5, of this present
volume].

Hab.—Ocean Beach, Point Nepean.

Obs.—A very small translucent shell.

Genus *Amussium*, Schumacher.

AMUSSIUM THETIDIS, Hedley.

1902. *Amusium thetidis*, Hedley. Mem. Austr. Mus.,
vol. iv., pt. 5, p. 304, f. 49.

Hab.—Ocean Beach, Point Nepean.

Obs.—One valve only obtained, and submitted to Mr. Hedley for comparison with the type of *A. thetidis*; he considers it to be the same species.

Family OSTREIDAE.

Genus *Ostrea*, Linnaeus, 1758.

OSTREA ANGASI, Sowerby.

1871. *Ostrea angasi*, Sowerby, in Reeve. Conch. Icon.,
vol. xviii., pl. 13, f. 27, erroneously numbered
28.

1878. *Ostrea angasi*, T. Woods. P.R.S. Tas., p. 56.

1886. *Ostrea angasi*, Tate. T.R.S. S.A., vol. ix., p. 110.
No. 166.

1901. *Ostrea angasi*, Tate and May. P.L.S. N.S.W.,
vol. xxvi., pt. 3, p. 441.

Hab.—Western Port; Port Phillip; Port Albert.

Obs.—This species occurs commonly in the old beach deposits of Port Phillip, also in the Pleistocene beds of West Melbourne.
